

CLAIMS

1. A biodegradable polyester resin composition comprising a thermoplastic polymer which comprises 100 parts by mass of an aliphatic polyester (A) and 0.01 to 5 parts by mass of a (meth)acrylic ester (B1) and/or a glycidyl ether (B2), the biodegradable polyester resin composition having a gelation index (1) of not lower than 0.1% and a gelation index (2) of not higher than 0.5%.
2. A biodegradable polyester resin composition of claim 1, wherein the aliphatic polyester (A) is a polylactic acid polymer.
3. A biodegradable polyester resin composition of claim 1, which has a melt viscosity of 0.2 to 10g/10 minutes as expressed by a melt flow rate value.
4. A preparation method for a biodegradable polyester resin composition comprising the step of melt-kneading an aliphatic polyester (A), a (meth)acrylic ester (B1) and/or a glycidyl ether (B2), and an organic peroxide (C), whereby the biodegradable polyester resin composition is prepared as containing a thermoplastic polymer comprising 100 parts by mass of the aliphatic polyester (A) and 0.01 to 5 parts by mass of the (meth)acrylic ester (B1) and/or the glycidyl ether (B2) and having a gelation index (1) of not lower than 0.1% and a gelation index (2) of not higher than 0.5%.
5. A preparation method of claim 4, wherein the aliphatic polyester (A) is melt-kneaded, and a solution or a dispersion of the (meth)acrylic ester (B1) and/or the glycidyl ether (B2) and the organic peroxide (C) is injected into the aliphatic polyester (A) during the melt-kneading of the aliphatic polyester (A), followed

by agitating and kneading.

6. A preparation method of claim 4, wherein the aliphatic polyester (A) and the organic peroxide (C) are melt-kneaded, and a solution or a dispersion of the (meth)acrylic ester (B1) and/or the glycidyl ether (B2) is injected into the resulting mixture during the melt-kneading of the aliphatic polyester (A) and the organic peroxide (C), followed by agitating and kneading.

7. A preparation method of claim 5 or 6, wherein a kneader is used, wherein a lower pressure region is defined downstream of a region in which the aliphatic polyester (A) is melted in the kneader, and the injection is carried out in the lower pressure region,

wherein the (meth)acrylic ester (B1) and/or the glycidyl ether (B2) are agitated and kneaded in a position of the injection and/or downstream of the position of the injection with respect to a direction of flow of the melted resin in the kneader, so that the resulting biodegradable polyester resin composition has a gelation index (1) of not lower than 0.1% and a gelation index (2) of not higher than 0.5%.

8. A biodegradable resin foamed article which is produced by foaming a biodegradable polyester resin composition of any one of claims 1 to 3.

9. A biodegradable resin molded article which is produced by extruding a biodegradable polyester resin composition of any one of claims 1 to 3.

10. A biodegradable resin molded article which is produced by injection-molding a biodegradable polyester

resin composition of any one of claims 1 to 3.

11. A biodegradable resin molded article which is produced by blow-molding a biodegradable polyester resin composition of any one of claims 1 to 3.